

IN THE CLAIMS

1. (original) A process for preparing catalyst systems of the Ziegler-Natta type, which comprises the following steps:
 - A) bringing an inorganic metal oxide into contact with a tetravalent titanium compound and
 - B) bringing the intermediate obtained from step A) into contact with a magnesium compound $MgR^1_nX^{1-2-n}$, where X^1 are each, independently of one another, fluorine, chlorine, bromine, iodine, hydrogen, NR^X_2 , OR^X , SR^X , SO_3R^X or $OC(O)R^X$, and R^1 and R^X are each, independently of one another, a linear, branched or cyclic C_1-C_{20} -alkyl, a C_2-C_{10} -alkenyl, an alkylaryl having 1-10 carbon atoms in the alkyl part and 6-20 carbon atoms in the aryl part or a C_6-C_{18} -aryl and n is 1 or 2,
 - C) bringing the intermediate obtained from step B) into contact with a halogenating reagent, and
 - D) bringing the intermediate obtained from step C) into contact with a donor compound.
2. (original) A process for preparing catalyst systems as claimed in claim 1, wherein a

magnesium compound MgR^1_2 is used in step B).

3. (currently amended) A process for preparing catalyst systems as claimed in claim 1 ~~or 2~~, wherein the halogenating reagent used in step C) is chloroform.
4. (currently amended) A process for preparing catalyst systems as claimed in claim 1 any of claims 1 to 3, wherein the inorganic metal oxide used in step A) is a silica gel.
5. (currently amended) A process for preparing catalyst systems as claimed in claim 1 any of claims 1 to 4, wherein the tetravalent titanium compound used in step A) is titanium tetrachloride.
6. (currently amended) A process for preparing catalyst systems as claimed in claim 1 claims 1 to 5, wherein the donor compound used in step D) contains at least one nitrogen atom.
7. (currently amended) A catalyst system of the Ziegler-Natta type which can be prepared by a process as claimed in claim 1 any of claims 1 to 6.
8. (original) A prepolymerized catalyst system comprising a catalyst system as claimed in claim 7 and linear C_2-C_{10} -1-alkenes polymerized onto it in a mass ratio of from 1:0.1 to 1:200.

9. (currently amended) A process for the polymerization or copolymerization of olefins at from 20 to 150°C and pressures of from 1 to 100 bar in the presence of at least one catalyst system as claimed in claim 7 or 8 and, if appropriate, an aluminum compound as cocatalyst.
10. (original) A process for the polymerization or copolymerization of olefins as claimed in claim 9, wherein a trialkylaluminum compound whose alkyl groups each have from 1 to 15 carbon atoms is used as aluminum compound.
11. (currently amended) A process for the polymerization or copolymerization of olefins as claimed in claim 9 or 10, wherein ethylene or a mixture of ethylene and C₃-C₈- α -monoolefins is (co)polymerized.
12. (currently amended) The use of a catalyst system as claimed in claim 7 or 8 for the polymerization or copolymerization of olefins.